

## TYPE 2 BAR

			_	*	*	₩	Α	MARK SIZE QUAN TYPE	
		4	4	4	4	4	5	SIZE	
								QUAN	
#5	#4	STR	2	STR	2	STR	STR	TYPE	
BARS	. BARS,		2'-0"		2'-0"	1		ZD	
TOTAL	TOTAL	-	9"		9"		-	S	
#5 BARS, TOTAL LENGTH	#4 BARS, TOTAL LENGTH	4'-9"	2'-9"	4'-9"	2'-9"		5'-0"	LENGTH	
								TOTAL LENGTH	

- STEEL SCHEDULE
- STEEL STEEL STEEL CONCRETE #4 #5 (0.28 CU.YDS./LIN.FT.) (5.0 FT./LIN. FT.) (21.37 FT./LIN. FT.) (42.5 FT./CORNER)  $\mathbb{C}$  $\Box$ Ξ  $\exists$ YDS.
- \*CONCRETE SHALL MEET PA 313 OR 561 SPECIFICATION REQUIREMENTS \*MINIMUM SPLICE LENGTH FOR ALL #4 BARS IS 16".

  \*MINIMUM SPLICE LENGTH FOR ALL #5 BARS IS 17".

  \*STEEL QUANTITY DOES NOT INCLUDE SPLICE LENGTHS.

  \*SUBSTITUTION OF GRADE 60 BARS IS PERMITTED.

TOTAL LENGTH OF WALL Ξ

MARK C & D BARS MAY BE COMBINED TO AVOID SPLICE. THEN MARK C BAR IS  $5^{\prime}-3^{\prime\prime}$  x  $9^{\prime\prime}$ .

FOR FROST PROTECTION, A 2-FOOT BACKFILL IS RECOMMENDED. DIMENSIONS ARE TO THE REINFORCING BAR SURFACE.

LIQUID-TIGHT JOINT \_ C.J. = CONSTRUCTION JOINT YES 8

LIQUID-TIGHT JOINT OPTIONS

HYDROPHILIC WATERSTOP NON-METALIC WATERSTOP (PVC)

. IF SLAB AND WALL ARE POURED SEPARATELY, THE SLAB SURFACE MUST BE THOROUGHLY CLEANED WITH WATER AND A WIRE BRUSH. THE SURFACE OF THE JOINT SHALL BE KEPT MOIST FOR AT LEAST 1 HOUR PRIOR TO CONSTRUCTION JOIN **OPTIONS** 

Date

<u>06/24/0</u>5

12 THE SLAB AND WALL MAY BE POURED AT THE SAME TIME ELIMINATING THE NEED FOR A CONSTRUCTION JOINT.

PLACEMENT OF NEW

CONCRETE.

RESTRAINING SLAB OPTIONS SLAB CORNER DETAILS 5-FOOT WALL CORNER DETAILS SEE SEE PA-026A PA-023 PA-024

## GENERAL DESIGN NOTES:

- DRAINAGE SHALL BE AWAY FROM THE WALL
- \*THE MINIMUM TOP WIDTH OF THE BACKFILL AGAINST THE OR GREATER THAN THE BACKFILL HEIGHT WALL SHALL BE EQUAL TO
- MAXIMUM FOOTING CONTACT PRESSURE IS 950 psf/ft.

DESIGN STRENGTHS: WORKING STRESS DESIGN

CONCRETE  $_{\rm c} = 4,000 \, \rm psi$ STEEL ⊸ ∽ 20,000 psi. (40 GRADE)

DESIGN LOADING: 313 STANDARD - LATERAL EARTH PRESSURE VALUES

SEE SECTION IV OF THE FIELD OFFICE TECHNICAL GUIDE

- MANURE LOAD INSIDE = 65 psf/ft. °SOIL BACKFILL LOAD OUTSIDÉ = 60 psf/ft.

ESTIMATED QUANTITIES

- \*NO HORIZONTAL SURCHARGE ADDED. \*SOIL BACKFILL DENSITY = 110 pcf. \*WATER TABLE MUST BE BELOW THE FOOTING ELEVATION
- WALL RESTRAINT REQUIREMENTS:
- THICK SLAB, SAFETY FACTOR AGAINST SLIDING

 $\leq$ 

4 FEET **	NO SLAB	O FEET
4 FEET **	NO SLAB	1 F00T
	NO SLAB	2 FEET
NO SLAB	NO SLAB	3 FEET
NO SLAB	10 FEET	4 FEET
NO SLAB	24 FEET	5 FEET
SLAB LENGTH FULL INSIDE LOAD	SLAB LENGTH NO INSIDE LOAD	BACKFILL HEIGHT (OUTSIDE LOAD)

\*\* MINIMUM SLAB LENGTH OF 4 FEET REQUIRED AND MUS T BE TIED INTO THE WALL FOOTING

SLAB POURED WITH WALL FOOTING:

#3 BARS @ 18" SPACING (MINIMUM REINFORCEMENT)

SLAB NOT POURED WITH WALL FOOTING:

#3 DOWEL BARS — 3'-0" LENGTH @ 5'-0" SPACING.

THIS STANDARDIZED DESIGN MUST BE ADAPTED TO THE SPECIFIC SITE. WITH THE WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSULS FILED AT THE NRCS STATE OFFICE, 8030 EXCELSIOR DRIVE, MADISON IT WAS DEVELOPED IN COOPERATION JMER PROTECTION. THE DESIGN FOLDER I, WI. 53717-2906

(ADAPTED FROM WI-550, APRIL 2005)

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COUNTY, PENNSYLVANIA

5' HIGH, 8" L-WALL (W/O SURCHARGE)

TJA